Missouri Department of Natural Resources

Steps to Asset Management Planning

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This paper describes how to get started in asset management in several steps.

There are various definitions for the notion of asset management (AM). At right is a simple one. AM is different from standard infrastructure management in this fundamental way. Standard management seeks to minimize cost to the system. AM seeks to maximize value to the ratepayers and community.

> Asset management: A continuous process of acquisition, use and disposal of infrastructure assets to optimize service delivery, and minimize costs over the asset's life
> American Public Works Association

In the ideal world, every piece of valuable infrastructure would be supported by a detailed AM program. That program would spell out how the infrastructure would be selected, designed, built, maintained, upgraded, decommissioned and replaced -- and how all this would be paid for. For most communities, that level of planning and execution is too aggressive.

For first-time AM planners, start with a plan that is as basic as needed to get a plan in place and as detailed as can be prepared with the resources at hand. A basic plan can always be upgraded in the future. This paper will provide ideas for first-time AM planners.

> Visit www.dnr.mo.gov/oac/lgov.htm#asset to learn more about asset management. Consider attending an asset management workshop listed at this Web site location.

If system management decides to hire a consultant to develop an AM plan that is beyond the technical capabilities of in-house staff, management must understand the elements of a good AM plan in order to properly acquire those services, supervise the consultant and execute the plan. Technical bulletins such as this one, and the cited resources, should be reviewed before starting a detailed AM planning process or hiring a consultant to prepare such a plan.

The following steps will provide guidance on developing a basic or intermediate AM plan. Specific tools mentioned are discussed as examples.

Initial Steps for any AM Planning Process

1. Read resources in "Resource Bibliography for Local Governments" www.dnr.mo.gov/oac/pub149.pdf, Asset Management section.
2. Read "Asset Management for Sewer Collection Systems" www.epa.gov/npdes/pubs/assetmanagement.pdf. This guide covers AM concepts and related issues.

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3. Read “Asset Management: A Handbook for Small Water Systems” www.epa.gov/safewater/smallsys/pdfs/guide_smallsystems_asset_mgmnt.pdf. This guide provides worksheets that can become a basic AM plan.
4. Search the Internet using keyword strings like “advanced asset management, water, sewer” to find other resources, model AM plans, etc.
5. Involve stakeholders – ratepayers, decision-makers, managers, staff, etc. – throughout the process. Be sure they understand and accept that AM is a strategically planned and executed approach to utility management that will provide them with long-term cost and risk control and system performance benefits. Together the stakeholders need to decide what benefits to seek as these decisions will determine the detail of the AM plan required and the cost to develop it.
6. Assign AM to a multi-discipline team. Likely, this will include the system manager or chief operator, the decision making body and whoever handles accounting duties.

Additional Steps for Basic AM Planning

7. Complete the worksheets in “Asset Management: A Handbook for Small Water Systems.”
8. Train staff in how to execute the AM program.
9. Analyze and adopt needed rates this year.
10. Track results and satisfy GASB Statement 34 accounting requirements.
11. Every year, reassess the AM program and performance, seek improvements and reanalyze and adjust rates.

Additional Steps for Intermediate AM Planning

7. Decide how detailed the initial AM plan is to be and if a consultant will be hired to produce part or all of it.
8. Decide upon and write down the mission and objectives for the utility.
9. Decide upon and write down how performance will be measured so it can be verified whether or not stated objectives were achieved.
10. Assuming the system does not hire a consultant, complete the worksheets in “Asset Management: A Handbook for Small Water Systems” up to the “Required Reserve Worksheet.” Beyond this point, advanced planning tools are needed.
11. Using much of the data developed for the previous worksheets, complete “Plan2Fund” http://sspa.boisestate.edu/efc/Tools&Services/Plan2Fund/plan2fund.htm. This program will calculate the required annual annuity for capital improvements and it will give system managers a good idea of the basic rates required to fund the program.
12. Train staff in how to execute the AM program.
13. Using much of the data developed in the previous tools, complete “Show-me Ratemaker” for sewer or water www.dnr.mo.gov/oac/lgov.htm#ratestudies, as appropriate and adopt needed rates this year. Show-me Ratemaker provides an accurate calculation of the rates needed, and it projects needed rates and finances for the next five years.
14. Track performance measures and compare to the stated objectives. Satisfy GASB Statement 34 accounting requirements.
15. Every year, reassess the AM program and performance, seek improvements and reanalyze and adjust rates every year.

For further assistance

Contact the Missouri Department of Natural Resources’ Environmental Assistance Office, Government Assistance Unit at 1-800-361-4827, oac@dnr.mo.gov, or visit the department’s Web site at www.dnr.mo.gov/oac/lgov.htm.